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Before the

FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

In the Matter of

Carrier Reports on Implementation  
Of Wireless E911 Phase II  
Automatic Location Identification

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CC Docket 94-102

**EDGE WIRELESS LICENSES, LLC  
AMENDED E911 PHASE II REPORT**

The Commission's rules require CMRS carriers to utilize either a network-based, a handset-based or a hybrid approach in order to comply with the Phase II E-911 requirements. On November 9, 2000, Edge Wireless Licenses, LLC. ("Edge") filed a report on its plans for implementation of wireless E911 Phase II automatic location identification ("ALI") systems.<sup>1/</sup> In that Report, Edge informed the FCC that it was not in a position to choose between a handset and network overlay solution. As a result of decisions now made regarding Edge's network, Edge hereby submits its amended report choosing, at this time, to implement a handset-based approach.

**INTRODUCTION**

Edge's service area presently consists of rural markets in Oregon, Idaho and Northern California. Except for a portion of the Idaho market, Edge, at this time, does not offer real time, two-way, switched voice service that is interconnected with the public switched network.

<sup>1/</sup> The E-911 Phase II Report was filed by NewCom Wireless, LLC ("NewCom". In November, 2000, NewCom Wireless, LLC changed its name to Edge Wireless, LLC and NewCom Wireless Licenses, LLC, a wholly-owned subsidiary of NewCom, changed its name to Edge Wireless Licenses, LLC. There was no change in ownership or corporate structure. This Amended E-911 Report applies to both Edge entities.

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Nonetheless, it is in the process of expeditiously building out its system in the remainder of its service area. Initially, Edge made a commitment to use TDMA IS-136 technology for its network. Recently, however, Edge has decided to transition its network from TDMA to GSM. Utilizing GSM will allow Edge's network higher speed data capabilities and its customers a wider array of mobile devices from the world's GSM vendors. Edge notes that it has not established any time frame for completion of this transition.

Nonetheless, Edge is fully committed to enhancing the safety of its subscribers and the communities it serves and, therefore, it continues to investigate every possible location service technology. Edge finds itself in agreement with most other carriers and public safety agencies that, ultimately, the best Phase II technology is handset-based. Edge's position is that handset technology has demonstrated the potential to be far more accurate than network-overlay solutions and it is considerably more adaptable to changing conditions. Unfortunately, however, the aggressive nature of the Commission's schedule for handset deployment has made it necessary for carriers to consider other, less optimal, interim solutions. As described below, Edge has developed a Phase II implementation plan that it believes comes as close to meeting the Commission's requirements as any other proposed solution.

## **DISCUSSION**

Edge decision to transition to GSM was based on its determination that such action would expedite the provision of the next generation of advanced wireless services to customers. For purposes of E911 Phase II compliance, Edge intends to deploy throughout its GSM network Enhanced Observed Time Difference of Arrival ("E-OTD") technology. E-OTD is a hybrid handset and network-based solution, which the Commission recently approved through a waiver to VoiceStream Wireless Corporation. As the Commission noted in that waiver order, E-OTD

may be the only viable solution for GSM carriers.<sup>2/</sup> Although Edge plans on making E-OTD available in its GSM network as expeditiously as possible, it intends on applying for any waivers that might be necessary when it has more information on its transition schedule and the performance and accuracy of the E-OTD technology. Edge plans to use GPS-equipped handsets as soon as they are commercially available from Edge's equipment vendors.

Additionally, during the phase-out of Edge's TDMA network, Edge is investigating the use of E-OTD for its existing TDMA network. Based on its preliminary analysis, E-OTD appears to be a promising solution in this circumstance. If Edge decides to implement this technology for its TDMA network, it will seek any waivers that might be required at that time.

Finally, Edge will be conducting numerous tests of its Phase II technology. Test environments will be conducted in a realistic field test environment, representing a wide range of operating environments and test conditions. Testing will include a large number of test calls from both stationary points and mobile routes, and will be conducted for both the AMPS and IS-136 TDMA air interfaces. These trials are designed to permit Edge, the PSAPs, vendors, and the Commission to gain crucial information about the performance and system impacts of the various network-overlay solutions. While a fair amount of testing of Phase II systems is underway today by other CMRS carriers, no end-to-end system has yet been deployed. Prior to such deployment, it is important for all affected parties to obtain as much information as possible so that consumers end up with the most viable solution as quickly as possible.

Although many problems can be overcome, Edge believes that it is necessary that they be taken into account prior to full-scale Phase II deployment. For this reason, it is extremely important that the network-overlay location solution trials are conducted extensively and that as

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<sup>2/</sup> Revision of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, Fourth Memorandum Opinion and Order,

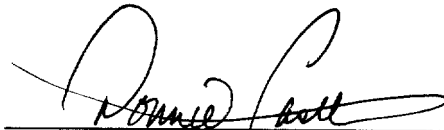
much information as possible (consistent with vendor-carrier non-disclosure agreements) be shared in a public forum.

### CONCLUSION

Edge intends to continue its work with vendors to identify the best Phase II solution possible for both its GSM and TDMA networks. At this point, Edge believes that the benefits of deploying the same solution for both air interfaces outweigh the detriments. Accordingly, unless any network-overlay trials demonstrate the superiority of a network-based solution, Edge plans to implement E-OTD technology across its network.

Respectfully submitted,

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